

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

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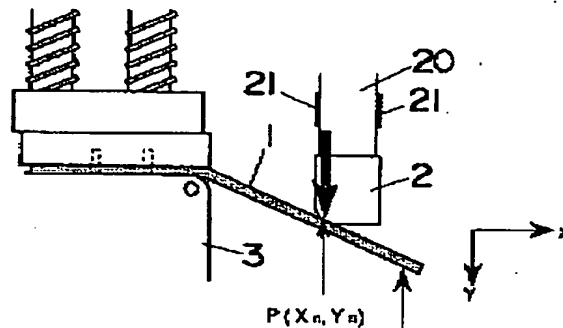
APPLICATION DATE : 27-09-94
APPLICATION NUMBER : 06231885

APPLICANT : MATSUSHITA ELECTRIC WORKS LTD;

INVENTOR : YOSHIDA TAKASHI;

INT.CL. : B21D 5/04

TITLE : METHOD FOR BENDING AND DEVICE THEREFOR



ABSTRACT : PURPOSE: To simply execute bending with high precision.

CONSTITUTION: The amount of spring-back corresponding to the target bending angle of an object to be bent is estimated, and the object to be bent 1 is pressed with a punch head 2 to a press bending angle which is added with this anticipated spring back amount onto the target bending angle. Then, the amount of spring back corresponding to the prescribed bending angle is estimated from the force applying on the punch head 2 in the time of pressing with the punch head 2, after the object 1 is pressed to the press bending angle obtained with the prescribed bending angle and the amount of spring back corresponding to the above, once it is unloaded and the object 1 to be bent is spring-backed, in this time point, the error of angle between the measuring value of the bent angle of the object 1 to be bent and the prescribed bending angle is obtained. The amount of spring back corresponding to the target bending angle is corrected with this error of angle, and the pressing amount of the punch head 2 is controlled so as to be made to this press bending angle.

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PUBLICATION NUMBER : 11216520
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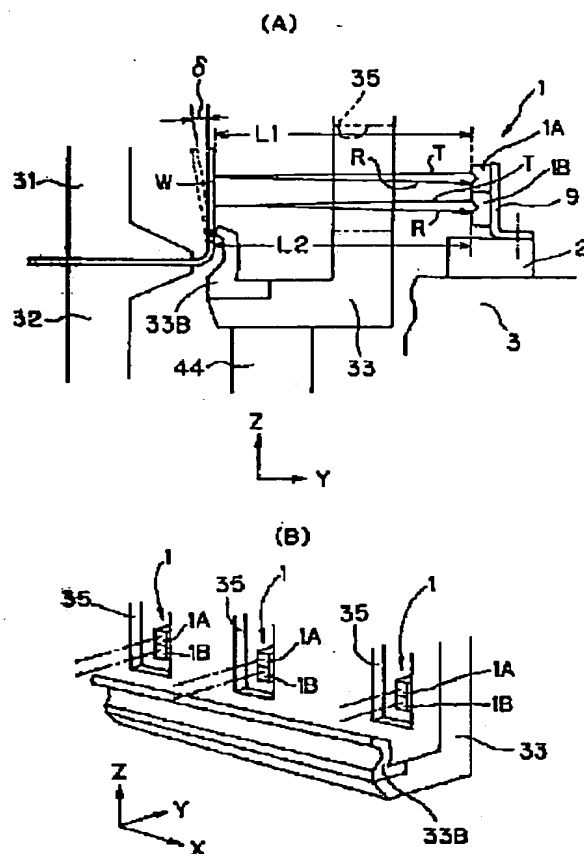
APPLICATION DATE : 30-01-98
APPLICATION NUMBER : 10018755

APPLICANT : AMADA CO LTD;

INVENTOR : ONARI HIROSHI;

INT.CL. : B21D 5/04 G01B 11/26

TITLE : PANEL BENDER



ABSTRACT : PROBLEM TO BE SOLVED: To improve the processing efficiency of a work by clamping the work with a top die and a bottom die and by bending the work with a bend beam, and also by controlling the driving shaft of the bend beam while the bending angle of the work under processing is automatically measured.

SOLUTION: This panel bender is a squeeze bending machine which conducts bending of a work W by swingingly moving a bend beam 33 upward and downward, wherein the work W clamped by a top die 31 and a bottom die 32 is bent at 90 degrees expecting the spring back quantity δ by a regular bending die 33B of the bend beam 33. An L-shaped bracket 9 is fixed on a pedestal 2 to a lower frame 3 located at the rear of the bend beam 33 and a distance sensor 1 is installed on this bracket. The distance sensors 1 are installed at three positions to detect the angles of three positions of the work W by an angle detection part, and adjust the center, right, and left variation of the bend beam 33 so as to make the detected angles become identical by a control part.

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